I CLAIM:

1. A method of sanding a generally planar surface of an article of wood, the method comprising:

providing a sanding machine including a conveyor having a feed direction, and an elongate platen structure carrying a sheet of sandpaper, the platen structure being disposed in a spaced-apart relationship with the conveyor to extend substantially across the conveyor generally crosswise to the feed direction;

placing the article on the conveyor;

transporting the article on the conveyor continuously in the feed direction past the platen structure while contacting the sandpaper with the generally planar surface to be sanded;

translating the platen structure in a first circular translational orbital path of a predetermined diameter at a first frequency of at least three thousand cycles per minute in a plane parallel to the planar surface of the article as the article is transported past; and

during the step of translating, imparting a cyclic second translational motion to the platen structure at a second frequency lower than the first frequency, the cyclic second motion being in the same plane as the first circular translational orbital path and driving the platen structure reciprocally in a direction transverse to the feed direction to prevent the formation of extended linear series of swirls on the generally planar surface of the article in a direction parallel to the feed direction by motion of the platen structure in the first circular translational orbital path over the article as the article is transported past the platen structure by the conveyor, where the cyclic second translational motion has a cyclic displacement with a range of displacement greater than the magnitude of the predetermined diameter of the first circular translational orbital path.

2. An article of wood sanded according to the method of claim 1.

3. A method of sanding a generally planar surface of an article of wood, the method comprising;

providing a sanding machine including a conveyor to carry articles in a feed direction and an elongate platen structure carrying a sheet of sandpaper, the platen structure being disposed in a spaced apart relationship with the conveyor with the elongate axis of the platen structure being disposed across the feed direction of the conveyor;

placing the article on the conveyor;

transporting the article on the conveyor past the platen structure continuously while contacting the sandpaper with the generally planar surface to be sanded;

translationally moving the platen structure in a first circular translational orbit at a first speed from one thousand to five thousand inches-per-minute, and in the plane of the generally planar surface of the article as the article is transported past; and

while translationally moving the platen structure in the first circular translational orbit, adding a cyclic second translational motion to the platen structure in the plane of the generally planar surface of the article at a second speed with an average magnitude lower than that of the first speed and in a direction transverse to the feed direction.

4. The method of claim 3 further including choosing a second speed with an average magnitude between 1/15 and 1/60 of that of the first speed.

5. An article of wood sanded according to the method of claim 3.

6. The method of claim 1 wherein the cyclic second translational motion is circular.

7. The method of claim 1, wherein the sanding machine further includes at least two power driven shafts supporting the platen structure, one shaft supporting the platen structure on one side of the platen structure's center and another shaft supporting the platen structure on a different side of the platen structure's center, wherein the platen structure is translated in the first circular translational orbital path by rotation of the at least two power driven shafts.

8. The method of claim 1, wherein the sanding machine further includes a vacuum positioned over the conveyor and downstream from the platen structure relative to the feed direction, and wherein the method includes the step of actuating the vacuum.

9. The method of claim 1, wherein the sanding machine further includes a rotating brush extending substantially across the conveyor and downstream from the platen structure relative to the feed direction of the conveyor, and wherein the method includes the step of rotating the brush as the conveyor transports the article so that the brush may contact the article on the conveyor.

10. The method of claim 9, wherein the sanding machine further includes at least two power driven shafts supporting the platen structure, one shaft supporting the platen structure on one side of the platen structure's center and another shaft supporting the platen structure on a different side of the platen structure's center, and wherein the platen structure is translated in the first circular translational orbital path by rotating the at least two power driven shafts; and wherein the sanding machine further includes a vacuum positioned over the conveyor and downstream from the platen structure relative to the feed direction, and wherein the method includes the step of actuating the vacuum.

11. The method of claim 10, wherein the sanding machine further includes a moveable brace supporting the at least two power driven shafts, and a motor mounted on the brace to drive the at least two power driven shafts, and wherein the cyclic second translational motion is imparted by moving the brace.

12. The method of claim 11, wherein a single point on the sandpaper moves to produce a contact pattern on the generally planar surface to be sanded that includes a series of loops extending generally back and forth across a portion of the generally planar surface and extending generally along the generally planar surface in the conveyor feed direction.

13. The method of claim 3, wherein the cyclic second translational motion is circular.